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THE INSECT PEST SURVEY  
BULLETIN

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A periodical review of entomological conditions throughout the United States  
issued on the first of each month from March to December, inclusive.

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I N S E C T   P E S T   S U R V E Y   B U L L E T I N

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OUTSTANDING ENTOMOLOGICAL FEATURES IN THE UNITED STATES FOR APRIL, 1927

The Hessian fly situation has developed no new features since our last report.

During the month serious infestations of the army cutworm have been reported from many places in Nebraska and Kansas.

The chinch bug passed the winter successfully in parts of Illinois, and despite wet weather spring mortality seems to be very low.

The true armyworm adults were observed during the first week in April in southern Illinois. This is about a week earlier than these insects appeared last year.

The corn ear worm appeared in injurious numbers in Louisiana and Texas the last week in April.

A very intense infestation by the spotted cucumber beetle attacking corn was reported from many localities from North Carolina across the cotton belt to Louisiana.

The sugarcane scale was recorded as doing a rather unusual type of damage to lawns in Florida.

Plant lice are generally more prevalent than last year on fruit trees in Massachusetts, Ohio, and Missouri.

The codling moth situation in the Middle West promises to be as serious as it was last year, a very high percentage of the larvae having come through the winter in good condition.

The eastern tent caterpillar appears to be as numerous as it was last year throughout New England in the Hudson Valley region of New York State. This insect seems to be more abundant than last year in the Middle Atlantic region, while, on the other hand, our only report from the South Atlantic States indicates a decided decrease in infestation in that region.

The plum curculio is more seriously prevalent in the Georgia peach belt than it was a year ago, and in fact than it has been since 1921. This insect was also reported as abundant and unusually early in southern Illinois.

One of the noteworthy developments of the month was the discovery of the orange maggot in the lower Rio Grande Valley. This is the first time that this serious citrus pest has been found established within the United States.

The turnip weevil has apparently spread over considerable new territory during the last year. Reports from many localities in Mississippi, Louisiana, and Alabama have been received this spring.

The seed-corn maggot has again been seriously abundant in eastern North Carolina and Mississippi.

The harlequin bug was reported as destructively abundant throughout the South Atlantic region and westward to Mississippi.

The first Mexican bean beetle of the season was found in the East Lake trucking section of Alabama on March 31, and the first eggs were found in the field on April 8. This is about two weeks earlier than this beetle was observed last year. The winter survival in hibernation cages is comparatively high.

The Chinese lily and Amaryllis are being attacked by a noctuid moth (Xanthopastis timais Cram.) in Florida.

A greater survival of the boll weevil has been reported up to April 16 in practically all of the cooperative stations this year than during 1926. Previous records indicate that about 26 per cent of the total survival emerge prior to April 16. General indications are that survival will be higher than usual in the Mississippi Valley except in the flooded districts. This is offset by the fact that in many sections the number of weevils entering hibernation was below normal. The weevil population in northern Louisiana was larger this year than any season since 1923. In the Coastal Plain region conditions are much more favorable, and present indications are that early infestation will be light. It must be understood, however, that the initial infestation is not the only limiting factor in the amount of weevil damage to be anticipated.

The cotton flea hopper has been hatching in Louisiana since early April. Indications are that in parts of Louisiana this insect may be serious. On the other hand, in the Texas cotton belt the present indications are that injury will not be so serious as last year.

This number of the Survey Bulletin contains the summary of the losses occasioned by the sugarcane borer in the years 1922-1926. The 5-year average amounts to nearly 20 per cent of a normal crop or approximately 59,000 tons of sugar. This year the borer developed 3 or 4 weeks ahead of development in 1926. The intensity of infestation seems to be higher this year than last. Throughout the lower Mississippi Valley region much damage by the sugarcane beetle is reported.

CEREAL AND FORAGE - CROP INSECTS

WHEAT

HESSIAN FLY (Phytophaga destructor Say)

Illinois

W. P. Flint (April 18): Observations in volunteer wheat, April 15, showed about 80 per cent of the fly in the pupal stage, and about 20 per cent still in the larval stage. No eggs were found on wheat plants in Urbana on this date.

GREEN BUG (Toxoptera graminum Rond.)

North Carolina

Z. P. Metcalf (April 25): C. H. Brannon reports that the green bug is destructive to winter rye on several farms in Alamance County.

PLAINS FALSE WIREWORM (Fleodes opaca Say)

Kansas

J. W. McColloch (April 10): The false wireworm was very prevalent in western Kansas last fall and again this spring. Owing to dry soil conditions much of the wheat did not germinate. The false wireworms worked on this seed last fall and early this spring. It is estimated that 2,000,000 acres of wheat in western Kansas will be abandoned because of dry weather and false wireworms.

ARMY CUTWORM (Chorizagrotis auxiliaris Grote)

Nebraska

Don E. Whelan (April 25): This cutworm has been reported from Chadron (Dawes Co.) where it had destroyed 200 acres of winter wheat and were still on the march. They were also reported from Grant (Perkins Co.) from Beaver City (Furnas Co.) and from Elgin (Antelope Co.).

Kansas

J. W. McColloch (April 1): Injury by the army cutworm has been reported from Downs, Otis, Alton, Salina, Bloomington, Phillipsburg, and Smith Center. In most cases the damage has been to wheat but at Downs this cutworm was also attacking alfalfa.

FIELD CRICKET (Gryllus assimilis Fab.)

South Dakota

H. C. Severin (April 14): Passed the winter successfully and in large numbers in the egg state. Considerable trouble expected from this pest in western South Dakota.

CORN

CHINCH BUG (Blissus leucopterus Say)

Illinois

W. P. Flint (April 18): An examination of chinch-bug hibernating

quarters, made on April 16, showed that considerable numbers of bugs were still present in such quarters. While the spring has been unusually wet, the adult bugs are very little affected by wet weather until after they have left the protection of their hibernating places. No serious damage from the chinch bugs is expected over the State this year.

EUROPEAN CORN BORER (*Pyrausta nubilalis* Hbn.)

Connecticut W. E. Britton (April 23): State and Federal men are now burning stalks, stubble, and weeds around each infestation in the quarantined towns of East Lynn, Waterford, New London, Groton, and Stonington. Fully as abundant as compared with an average year.

General Monthly Letter of the Bureau of Entomology (March 1927): Shipments from Europe to the United States of parasites and parasitized larvae of *Pyrausta nubilalis* are steadily being made. For the present fiscal year to date shipments have been made as follows: *Eulimneria crassifemur*, 20,534; *Angitia punctaria*, 11,209; *Phaeogenes planifrons*, 17,017; *Microgaster tibialis*, 127,680; *Masicera scutella*, 1,652; parasitized larvae bearing various percentages of other species, 1,242,000.

ARMYWORM (*Cirphis unipuncta* Haw.)

Illinois W. P. Flint (April 18): Adults of the armyworm were taken during the week of April 4 in southern Illinois, and the next week in small numbers at bait traps in central Illinois. Observations thus far do not indicate that the moths are present in more than normal numbers.

CORN EAR WORM (*Helicthis obsoleta* Fab.)

Louisiana W. E. Hinds (April 25): The corn ear worm is developing abundantly in early planted fields of corn. It has proven to be more injurious than usual in its attack on sweet peas and other early spring host plants.

Texas F. L. Thomas (April 25): The corn ear worm is causing injury in some corn fields near Robstown.

FALL ARMYWORM (*Laphygma frugiperda* S. & A.)

Louisiana T. E. Holloway and W. E. Haley (April 12): The fall armyworm was found injuring young corn at Cutoff, La.

SPOTTED CUCUMBER BEETLE (*Diabrotica duodecimpunctata* Fab.)

North Carolina J. N. Tenhet (April 21): Slight damage common; one field of about 10 acres three-fourths destroyed. Field being replanted. Damage negligible on high ground, 100 per cent destruction on low bottom land at Chadbourn.

Alabama J. M. Robinson (April 6): The southern corn root worm is present in large numbers at Auburn and is already attacking corn that has been planted in various portions of the State.

Louisiana J. W. Ingram (April 5): Southern corn root worms were found to have killed about 5 per cent of the corn plants in a field near LaCassine.

CORN ROOT APHID (Anuraphis maidi-radicis Forbes)

Missouri A. C. Burrill (April 7): First wingless female seen on walk on afternoon of March 15, 1927, and first winged female seen at noon March 16, as the first little plum tree began to bloom.

ALFALFA

PEA APHID (Illinoia pisi Kalt.)

Kansas J. W. McColloch (April 15): The pea aphid has been reported injuring alfalfa at Anthony, Sharon, Great Bend, and Hutchinson.

CLOVER

GREEN CLOVER WORM (Plathypena scabra Fab.)

Alabama C. A. Walker (February 24): Reported from Anniston.

CLOVER HEAD WEEVIL (Phytonomus meles Fab.)

New York E. P. Felt (April 25): Clover weevils, Phytonomus meles, were somewhat numerous in the air on April 20.

CLOVER BUD WORM (Phytonomus nigrirostris Fab.)

New York E. P. Felt (April 25): Phytonomus nigrirostris was somewhat numerous in the air on April 20.

A LOOPER (Drasteria crassiuscula Haw.)

New York E. P. Felt (April 22): First adults taken by Roy Latham at Orient, April 15.

GRASS AND LAWNS

ANOMALA (Anomala orientalis Waterh.)

Connecticut R. B. Friend (April 23): The hibernating larvae have begun to come up to the surface of the soil in sheltered places at New Haven.

SUGARCANE SCALE (Targionia sacchari Ckll.)

Florida

M. D. Leonard (March 23): In making the determination of this scale for me Mr. Merrill writes: "This is the first time we have received this scale on a grass. However, Mr. Sasscer has written that this scale was found on centipede grass at Coconut Grove, as well as at the Plant Introduction garden at Savannah, Ga." This scale was doing considerable damage to the lawn on a large estate, big patches of grass having been killed out at Palm Beach.

F R U I T I N S E C T S

APPLE

APHIIDAE

Massachusetts

A. I. Bourne (April 23): Because of the warm weather which we had about the middle of March, apple plant lice were observed by the 10th or 12th of April. By the 15th of the month the apple buds were opening into the delayed dormant condition, and the sudden appearance of warm weather on the 15th brought plant lice out in large numbers. Reports indicate the apple plant lice are much more abundant this year than last year and are about what we experience in a normal season.

Connecticut

Philip Garman (April 23): Not abundant, but relatively scarce according to the observations of E. M. Stoddard of this station. Attacking apple. Apparently not so numerous as last year.

APPLE GRAIN APHID (Rhopalosiphum prunifoliae Fitch)

Ohio

E. W. Mendenhall (April 20): Oct aphids are making their appearance this spring in usual amount throughout the State. Rather hard to control.

Missouri

A. C. Burrill (April 4): Swarming in buds of neglected orchard. Have not yet proved them general and do not know at this time if they will reach epidemic proportions.

APPLE APHID (Aphis pomi DeG.)

Massachusetts

A. I. Bourne (April 23): Mr. Whitcomb reports in Middlesex County that Aphis pomi DeG. was found in moderate numbers on the 6th of April. A still earlier report from Middlesex County records the finding of one or two specimens of this species as early as April 1.

Ohio      E. W. Mendenhall (April 20): The appearance of the apple aphid shows about the usual infestation on apple even where the regular spray program is carried on.

Oregon      Don C. Mote (April 9): First adults observed by B. G. Thompson, March 28. On April 4 he reported a 20 per cent hatch.

CODLING MOTH (Carpocapsa pomonella L.)

Illinois      W. P. Flint (April 18): First pupation of overwintering larvae of the codling moth was observed in southern Illinois on April 6. No pupation has been observed in the central part of the State. The overwintering larvae of the codling moth are fully as abundant as in the spring of 1926, a very high percentage of the worms having come through the winter alive. The present prolonged rainy period is likely to prevent the application of the calyx spray in many southern and south-central Illinois orchards where the apples are already out of the bloom.

Kentucky      H. Garman (April 14): The adult codling moth is emerging, and some mischief is expected from it in the apple-growing sections about Henderson where there is some probability that it will continue numerous this season.

Oregon      Don C. Mote (April 9): First pupae found by B. G. Thompson on April 7, at Corvallis.

BUD MOTH (Thetocera ocellana Schiff.)

Massachusetts      A. I. Bourne (April 25): Mr. Whitcomb, of the Market Garden Field Station at Waltham, Middlesex County, reports as follows: Apple bud moth, larvae active in buds which are at prepink stage. Normal in abundance.

STRAWBERRY TIGER MOTH (Haploa colona reversa Stretch)

Kentucky      H. Garman (April 14): This bud worm of apple, treated in our circular No. 25, 1921, is abundant on apple trees near Fordville, in Ohio County, and is now about three-fourths grown.

EASTERN TENT CATERPILLAR (Malacosoma americana Fab.)

Massachusetts      A. I. Bourne (April 23): Because of the considerable amount of warm weather which we had for a week or two about the middle of March, we noted some appearance of tent caterpillars by the 10th or 12th of April. By the 15th of the month the apple buds were opening into the delayed-dormant condition

and the sudden appearance of warm weather on the 15th and thereafter brought tent caterpillars out in large numbers. It is still too early to make any accurate estimate of the relative abundance of the tent caterpillars, but from all indications at hand they are fully as numerous as last year. From counts which we have already made of several thousand eggs of this insect, we find that the highest percentage of parasitism is only about 10 per cent and that the average is about 6, so that there does not appear to be a very great increase in the amount of parasitism over last year.

Connecticut      W. E. Britton (April 23): Small nests are now conspicuous everywhere on apple and wild cherry. Campaigns for the destruction of egg clusters by boys and girls were conducted in several towns.

New York      E. P. Felt (April 22): Apparently abundant in the Hudson Valley, hatching being recorded at Mt. Vernon (G. M. Codding) April 15; at Blauvelt, Orange County (P. L. Huested) April 16; at Rochester (R. E. Horsey), April 21; and at Nassau, Rensselaer County, April 21.

E. P. Felt (April 23): First hatching of apple tent caterpillar observed at Rye, April 14. There seemed to be fewer egg masses locally as a result of systematic collecting by school children (Henry Bird). The first hatched caterpillars were observed at Orient, L. I. April 21 (Roy Latham).

North Carolina      Z. P. Metcalf (April 25): The apple tent caterpillar, which was very abundant and widespread last spring, is rather conspicuous by its absence this spring.

#### TARNISHED PLANT BUG (Lygus pratensis L.)

North Carolina      Z. P. Metcalf (April 25): Reports show that the tarnished plant bug has seriously damaged developing fruit buds of the apple in Macon County.

Kansas      J. M. McColloch (April 14): Adults of this bug are very abundant on buds of apple blossoms. They have injured many buds to such an extent that they will not bloom.

#### APPLE LEAFHOPPER (Empoasca mali LeB.)

Ohio      E. W. Mendenhall (April 20): The apple leafhopper is present again this spring in the usual proportions and this one is very hard to control and seems to do most damage to apple and grape.

#### SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

Connecticut      Philip Garman (April 23): There is no problem in scale control

in Connecticut today. The pest is hard to find in most orchards.

New York

E. P. Felt (April 22): More abundant than usual at Rochester, being found on Japanese quince, mountain ash, crab apple, Japanese cherry, and ornamental plum (R. E. Horsey).

Illinois

W. P. Flint (April 18): Examinations of overwintering San Jose scales show that from 15 to 30 per cent of the scales survive the winter. These figures hold for central and south-central Illinois. No examinations were made in the northern part of the State.

#### OYSTER-SHELL SCALE (Lepidosaphes ulmi L.)

North Carolina

Z. P. Metcalf (April 25): C. H. Brannon reports that the oyster-shell scale is doing considerable damage to apple orchards in Surrey County.

#### SCURFY SCALE (Chionaspis furfura Fitch)

South Dakota

H. C. Severin (April 14): The winter was passed successfully. Ordinarily this scale is not so abundant or harmful as the oyster-shell scale.

North Carolina

Z. P. Metcalf (April 25): C. H. Brannon reports that the scurfy scale is doing considerable damage to apple orchards in Surrey County. It is found abundantly on black gum near the orchards, thus furnishing a continuous supply for reinestation.

#### APPLE FLEA WEEVIL (Orchestes pallicornis Say)

Illinois

W. P. Flint (April 18): The apple flea weevil has been reported as present in unusual numbers in western Illinois orchards.

#### EUROPEAN RED MITE (Paratetranychus pilosus C. & F.)

Connecticut

Philip Garman (April 23): Present in nearly all orchards in New Haven County, but not especially abundant in any.

### PEAR

#### PEAR PSYLLA (Psyllia pyri L.)

Massachusetts

A. I. Bourne (April 23): We have noted the first appearance of eggs of the pear psylla on the 15th and 16th of April at the College. (April 25): Mr. Whitcomb (Middlesex County) reports as follows: Adults very active and abundant on trees examined. Majority of eggs laid and present in large numbers. Most varieties of pears in cluster-bud stage ready for psylla egg spray.

AN ANOMALA (Anomala undulata Melsh.)

Mississippi

R. W. Harned (April 25): A lot of these beetles were received from Agricola where they were found on February 26. The correspondent who collected them stated that they appeared just at dusk in large numbers and attacked pear and fig trees. Very few were present the next morning, although a few were noticed the second night. They were only noticed in large numbers on one night. Our correspondent states: "The peculiar thing about them was that they collected on a few trees only that had just been set out and did not harm trees that had been set the previous year that were growing nearby. The leaves of the newly set trees were wilted and that might have attracted the beetles."

PEACH

ORIENTAL PEACH MOTH (Laspeyresia molesta Busck)

Georgia

Messrs. Snapp and Swingle (April 6): The first moth emerged on February 24. Moth emergence last year did not start until March 28. The first twig injury by this insect's larvae was noted this year on April 2. (April 20): Twig injury from first-generation larvae has been noticed since April 2. First full grown larva of first brood noted April 12.

Alabama

H. P. Harris (February 11): Reported from Anniston.

TARNISHED PLANT BUG (Lygus pratensis L.)

Illinois

S. C. Chandler (April 13): Tarnished plant bugs are much more numerous this year in southern Illinois than in 1926. The first injury to peach by these insects was observed on this date.

SAN JOSE SCALE (Aspidiotus perniciosus Comst.)

Georgia

O. I. Snapp (April 6): The San Jose scale is apparently under good control in most orchards. Three per cent lubricating-oil emulsion was used on at least three-fourths of the acreage that was sprayed last winter for this pest. Liquid lime-sulphur was used in most other cases. (April 20): Many crawlers observed today.

RUSTY PLUM APHID (Hysteroneura setariae Thos.)

Georgia

O. I. Snapp (April 18): This insect appeared this year a little earlier than usual. It is now attacking young peach trees in Fort Valley.

THRIPS (Thysanoptera)

Illinois

S. C. Chandler (April 13): Thrips were first observed in peach blossoms on April 13 in Johnson County. These insects were much more numerous than in 1926.

GREEN PEACH APHID (Myzus persicae Sulz.)

Georgia

O. I. Snapp (April 7): Several colonies were found today on peach limbs. This insect is not common in the Georgia Peach Belt.

PEACH BORER (Aegeria exitiosa Say)

Kentucky

H. Garman (April 14): The peach tree borer is becoming active and, in some cases, is nearly ready for pupation although others are considerably smaller.

LESSER PEACH BORER (Sesia pictipes G. & R.)

Georgia

O. I. Snapp (April 6): This insect is apparently more abundant than normal in Fort Valley, and in some orchards is causing considerable injury, particularly those that have been somewhat neglected.

PLUM CURCULIO (Conotrachelus nenuphar Hbst.)

Georgia

O. I. Snapp (April 6): The first curculio eggs were observed in Fort Valley on March 25. Larvae a week or ten days old were found in the orchards on April 5. The infestation is apparently heavier than it was a year ago. Growers are now making the second application of spray or dust for the control of this insect. Larvae were not found in the orchards last year until April 21. (April 20): Apparently the curculio infestation is heavier in the Georgia Peach Belt this year than it has been since 1921. Matured larvae are now leaving the drops in numbers; 3,217 larvae have already been taken from 5 bushels of drops collected on April 11. Over 1,400 came out in one day. Growers have started late to enforce control measures. More or less curculio damage to the Georgia peach crop this year is anticipated.

Illinois

S. C. Chandler (April 6): The plum curculio was taken in abundance in southern Illinois on April 6, which is a little earlier than usual with respect to the development of the peach, and 21 days earlier by the calendar than in 1926. Cool rainy weather has prevented much activity on the part of the curculio.

GRAPE

APHIIDAE

Florida

J. R. Watson (April 8): Aphids are quite numerous on grapevines

near Gainesville, but perhaps no more so than usual at this time of the year.

## C I T R U S A N D S U B T R O P I C A L F R U I T S

### SPIRAEA APHID (Aphis spiraecola Patch)

Florida J. R. Watson (April 8): The new citrus aphid is increasing in number and a large proportion of the winged forms have been produced; however, oranges are too far along in their growth to be much injured by them with the exception of young trees which were severely hurt by frost last winter. Tangerines are suffering some.

### ORANGE MAGGOT (Anastrepha ludens Loew.)

Texas F. L. Thomas (April 25): A new pest, the orange maggot, Anastrepha ludens, has been reared from grapefruit grown in the Lower Rio Grande Valley. The determination has just been verified by Prof. J. M. Aldrich of the Museum.

### SPOTTED CUCUMBER BEETLE (Diabrotica duodecimpunctata Fab.)

Mississippi R. W. Harned (April 25): On April 19 Mr. P. K. Harrison, stationed at Picayune, sent in an interesting note in regard to a heavy infestation of Diabrotica duodecimpunctata. This was accompanied by a number of the beetles that were collected from Satsuma orange and pear trees on the property of the Ozona Orchard Company in Pearl River County. The Superintendent reports that "Immediately previous to the unusual heavy rain and gale from about 8:30 A.M. on April 15 to 6:00 A.M. on April 16, I have never seen as heavy an infestation of Diabrotica duodecimpunctata." Harrison reports that the damage to the trees can easily be detected before one gets near to them, the leaves in many cases being almost entirely eaten. Only about 100 acres of the Satsuma orchard and all of the 20 acres of the pear orchard were infested. A large amount of damage was done to the blossoms and young fruit of the Satsumas. On April 19 there were not many beetles at work, but a few were collected and sent to this office.

## T R U C K - C R O P I N S E C T S

### MISCELLANEOUS FEEDERS

#### WESTERN SPOTTED CUCUMBER BEETLE (Diabrotica soror Lec.) active

Oregon Don C. Mote (April 9): The first adults of the twelve-spotted leaf beetle, Diabrotica soror, were observed on March 27 at Corvallis.

TURNIP WEEVIL (Listroderes obliquus Gyll.)

Mississippi

R. W. Harned (April 25): Specimens of the Australian turnip or tomato weevil, were received from Natchez on March 30, where they were reported as causing serious damage to turnips. Specimens were also received from Gloucester on April 2, where they were reported as injuring cabbage and tomato plants. Still another complaint in regard to serious damage caused by these insects to tomato plants was received on April 23 from Lincoln County.

Louisiana

W. E. Hinds (April 25): The Australian tomato weevil has apparently increased its area of infestation and has now reached the adult stage in its development. These adults do extensive feeding damage on many crops before they deposit their eggs and disappear for the balance of the season. It seems that these weevils are attracted somewhat to lights, and may be quite active fliers.

Alabama

A. Boyles (March 17): Reported from Mobile as attacking cabbage.

J. M. Robinson (April 16): The Australian tomato weevil has been reported attacking cabbage as well as turnips in Mobile County.

A MOLE CRICKET (Gryllotalpa sp.)

Alabama

J. A. Pettis (March 9): Reported from Winn as attacking plants and vegetables.

Texas

F. L. Thomas (April 25): Mole crickets are doing damage in Liberty and Brazoria Counties.

APHIIDAE

Alabama

J. M. Robinson (April 6): There are many species of aphids attacking crops, from the various garden vegetables to roses, chrysanthemums, and pecan trees at Auburn.

SOWBUGS (Oniscidae)

Mississippi

K. L. Cockerham (April 16): Since February these sowbugs or pillbugs have been very numerous in and around Biloxi. At times one can get out in the vegetation around flower beds and near vegetable patches and literally pick them up by the handfuls. Along the coast these bugs appear as a pest practically every spring and they threaten to become serious to certain crops.

R. W. Harned (April 25): Quite a few complaints have been

received in regard to damage caused by pillbugs to strawberries this spring. Specimens were received from two properties at Pascagoula on April 5, where they were reported as causing damage to strawberries. A serious complaint in regard to damage by these creatures to lilies was reported from Meridian on March 30. The correspondent writes: "I am having considerable trouble with a bug that is cutting my flowers down. They cut them off near the ground very much like cutworms except a little higher from the ground. They have destroyed a number of bunches of Easter Lilies that would soon have been in bloom."

A correspondent from Oklahoma sent us specimens of pillbugs on April 11 with the statement that they were causing serious damage to her petunias, snap-dragons, and other flowers.

#### FLEAS BEETLES (Halticinae)

Mississippi

R. W. Harned (April 25): During the past few weeks quite a number of complaints have been received in regard to flea-beetles, both larvae and adults. Specimens of the larvae that were reported as causing damage to turnips and mustard were received from Fenwick on April 1, from Natchez on March 30, from Grenada on April 16, and from Como on April 12. We also received one complaint accompanied by specimens from Cuevas in regard to flea-beetle larvae causing damage to strawberries.

#### A WHITE GRUB (Phyllophaga arcuata Sm.)

Alabama

B. L. Allen (February 3): Reported from Newbern attacking garden plants.

#### SPOTTED CUTWORM (Agrotis c-nigrum L.)

Massachusetts

A. I. Bourne (April 23): Mr. Whitcomb has just sent in a report on the spotted cutworm as follows: "Nearly full grown larvae numerous and active. They are now feeding on chickweed, clover, and shepherd's purse, but promise to attack severely any garden plants which are sprouted or transplanted in the next two weeks."

#### CUTWORMS (Noctuidae)

Florida

F. M. McIntyre Jr. (February 14): Reported from West Palm Beach attacking peanuts and other plants.

Texas

F. C. Bishopp (April 23): Cutworms have been unusually destructive in various parts of Texas during the early spring. Field crops as well as garden stuff have been damaged considerably, and much poisoning has been done against them.

#### POTATO

#### LEAF-FOOTED BUG (Leptoglossus phyllopus L.)

Mississippi

K. L. Cockerham (April 7): On this date at Carriere, Pearl River

County, these plant bugs were puncturing and sucking leaves, petioles, and stems in an 18-acre field of potatoes. In walking across the field I could occasionally see a wilted top of a plant.

COLORADO POTATO BEETLE (Leptinotarsa decemlineata Say)

New York E. P. Felt (April 23): The first adult was observed flying at Orient, L. I. April 20 (Roy Latham).

Alabama J. M. Robinson (April 6): The Colorado potato beetle is quite active over the State.

Louisiana W. E. Hinds (April 25): Colorado potato beetles have been reported as seriously abundant in only a few localities. The major part of the early potato crop of this State is produced without any necessity for poisoning these beetles.

SEED-CORN MAGGOT (Hylemyia cilicrura Rond.)

North Carolina W. J. Reid Jr. (April 6): A heavy infestation of the seed-corn maggot was found in the potato seed planted in the vicinity of Pantega and Beaufort. The maggot injury was associated with a rather severe decay of the seed pieces in that particular section. At the time of the examination, the great majority of the larvae had left the seed and had pupated.

Z. P. Metcalf (April 25): The seed-corn maggot has been especially destructive in the State this spring. It seriously damaged young tomato plants in cold frames in Rowan County, beans in Henderson County, and Irish potatoes in Washington County.

Mississippi R. W. Harned (April 25): Serious damage to onion sets by Hylemyia cilicrura was reported from Louise on March 31.

POTATO APHID (Illinoia solanifolia Ashm.)

Florida J. R. Watson (April 8): The tomatoes on the lower east coast of Florida about Miami are being severely attacked by this aphid.

CABBAGE

IMPORTED CABBAGE WORM (Pieris rapae L.)

New York E. P. Felt (April 22): The first cabbage butterfly was observed at Orient, L. I. (Roy Latham) March 14, it becoming abundant April 15, a hundred or more being seen that day. (April 23): The first cabbage butterfly was observed at Rye, April 15 (Henry Bird).

Kentucky H. Garman (April 14): The imported cabbage butterfly has been

observed frequently for two weeks past, but there is no crop in the fields at present on which it can do serious mischief.

Oregon Don C. Mote (April 9): Adults observed by J. Wilcox, March 27.

HARLEQUIN BUG (Murgantia histrionica Hahn)

North Carolina Z. P. Metcalf (April 25): The harlequin bug was very destructive last summer and is continuing its destructive work in many localities in the State this spring.

Georgia O. I. Snapp (March 21): A number of reports of this insect injuring young cabbage plants have come to the laboratory during the last several weeks.

Alabama Albert P. Segers (February 28): Reported from Vocation attacking cabbage.

A. L. Dees (March 30): Reported from Mt. Meigs attacking garden plants.

J. M. Robinson (April 6): The harlequin cabbage bug has been very abundant and active over the State.

L. W. Brannon (April 15): The harlequin bug has been doing considerable damage to cabbage, mustard, and turnips this spring and specimens have been seen active in the field since the middle of March. Egg masses of this insect are fairly numerous now. This insect was very bad last fall in this district (Birmingham) and will no doubt be of considerable economic importance this season.

Mississippi R. W. Harned (April 25): The harlequin bug has been reported as causing serious damage to cabbage, collards, mustard, turnips, and other crops at many places throughout the State. From most places this insect is reported more abundant than it has been for several years. Eggs have been deposited in large numbers throughout April. From West Point in Clay County, however, the harlequin bugs are reported as being less abundant than they were last year.

STRAWBERRY FLEA BEETLE (Haltica litigata Fall)

Alabama Aubrey Boyles (March 17): Reported from Mobile attacking cabbage.

STRAWBERRY

STRAWBERRY ROOT WORM (Paria canella Fab.)

North Carolina W. A. Thomas (April 11): This insect has entered the strawberry fields from adjacent woods and in a few places is almost completely defoliating the plants. So far, no egg laying has been observed.

METALLIC STRAWBERRY ROOT BORER (Graphops pubescens Melsh.)

New York E. P. Felt (April 25): Graphops pubescens was somewhat common.

STRAWBERRY ROOT APHID (Aphis forbesi Weed)

North Carolina W. A. Thomas (April 4): This aphid appears to be much more abundant than at the same date last season. The infestation has already spread from the roots to the stems and developing leaves just above the surface of the ground. Attendant ants are much in evidence about the infested plants. The infestation seems to be more general this season than usual. Practically every farm observed so far shows this insect present. The present aphid infestation may presage serious injury this coming fall.

A MILLIPEDE (Cambala annulata Say)

Kentucky H. Garman (April 14): I have recently received a communication from western Kentucky stating that a worm, of which samples were submitted, is doing a great deal of injury to strawberry plants. It proves to be the millipede Cambala annulata.

STRAWBERRY ROOT WEEVIL (Brachyrhinus ovatus L.)

Oregon Don C. Mote (April 9): Overwintering strawberry weevils, Brachyrhinus ovatus, appear to be much less numerous this year than last year. In a strawberry patch of 2.5 acres in which they were reported as being numerous last spring, only 45 weevils were found in an examination of 135 plants.

STRAWBERRY WEEVIL (Anthonomus signatus Say)

Arkansas W. J. Baerg (April 12): About one-third of the blossoms are out, and in but one field out of six was any weevil injury observed. This is in our typical "weevil territory." It seems there will be only a small trace of injury by the weevil this year.

RED SPIDER (Tetranychus telarius L.)

Mississippi R. W. Harned (April 25): Red spiders have been reported as causing considerable damage in different sections, especially from the southern half of the State. They have been reported on strawberries in three fields near Meridian on April 13, on water oak at Natchez on April 14, on camellia japonica at Hattiesburg on April 14, and on sweet pea and hollyhock at Brookhaven on April 21.

GARDEN SLUG (Ariolimax agrestis L.)

Louisiana W. E. Hinds (April 25): The brown garden slug, which occurs

abundantly in grass ground, has been reported as injuring severely the fruit of the strawberry in areas where the ground is heavily mulched with pine straw, and also injuring lettuce in gardens particularly where the garden is kept well sprayed.

### ASPARAGUS

#### W-MARKED CUTWORM (Agrotis unicolor Walk.)

Illinois W. P. Flint (April 18): W-marked cutworms have been observed injuring asparagus. Most of the injury is occasioned by small holes eaten in the growing tip of the asparagus shoots. Two per cent injury was observed in one patch, which would mean a much higher percentage of injury for a total crop of the season.

### BEANS

#### MEXICAN BEAN BEETLE (Epilachna corrupta Muls.)

Alabama L. W. Brannon (April 15): The first Mexican bean beetle of the season was found feeding on bean leaves in the East Lake trucking section on March 31. The first egg mass was found in the field on April 8. During the 1926 season the first bean beetle was found active in the field on April 12, which is about two weeks later than this season. Up to this date, the results of the emergence of beetles from the hibernation cage indicate that the survival will be high since 11.3 per cent have emerged.

#### BEAN LEAF BEETLE (Cerotoma trifurcata Forst.)

Alabama L. W. Brannon (April 15): Adults of this species are doing considerable damage to young beans in the Birmingham district. They are appearing in larger numbers than at the beginning of last season.

#### GARDEN SLUG (Agriolimax agrestis L.)

Mississippi R. W. Harned (April 25): Slugs were reported as injuring bean plants in Amite County on March 29. (Specimens identified by the Division of Mollusks of the National Museum.)

### PEAS

#### PEA APHID (Illinoia pisi Kalt.)?

Arizona Arizona News Letter (Vol. 5, No. 2, February 28, 1927): The large green pea aphid has been found in many of the fields of winter peas. This insect caused some damage during the spring of 1926, and the present outlook is not encouraging. Many of the growers have been using the nicotine dust preparations in

an attempt to check the pest, while several others have used the liquid sprays. The tobacco sprays are being used.

SWEET POTATO

COFFEE-BEAN WEEVIL (*Araecerus fasciculatus* DeG.)

Alabama

Troy Thompson (April 7): These insects were found feeding on sound potatoes in a storage bank about 6 miles north of Grand Bay in Mobile County. Extensive feeding signs were noted over a good portion of the potatoes in this bank. In 1926 we found a similar occurrence in Baldwin County near Foley. These insects usually attack dried products.

CARROT AND PARSNIP

CARROT RUST FLY (*Psila rosae* Fab.)

Connecticut W. E. Britton (April 23): Injured parsnips received from Winsted, March 23, contained larvae. I also found them in my own garden, at New Haven. These insects have not been observed before.

## SOUTHERN FIELD - CROP INSECTS

COTTONBOLL WEEVIL (Anthonomus grandis Boh.)

B. R. Coad (Cooperative Report March 16): The percentage of weevils which had emerged to this date is as follows:

Station	Per cent of number put into cages that emerged prior to March 16.
---------	-------------------------------------------------------------------

	1925	:	1926	:	1927
College Station, Tex.	0.38	:	0.98	:	1.36
Florence, S. C.	1.22	:	.01	:	.65
Aberdeen, N. C.	.19	:	0	:	.58
A. & M. College, Miss.		:	0	:	.21
Auburn, Ala.	0	:	0	:	.11
Tallulah, La.	.003	:	.002	:	.06
Rocky Mount, N. C.	0	:	0	:	.05
Stoneville, Miss.		:	0	:	.02
Baton Rouge, La.	.34	:	.26	:	0
Experiment, Ga.	.43	:	0	:	0
Holly Springs, Miss.	0	:	0	:	0
Raymond, Miss.		:	0	:	0
Poplarville, Miss.		:	0	:	0
Fayetteville, Ark.		:		:	0

No general conclusions can be drawn from these very early records. It will be noted that weevil emergence was reported from 8 of the cooperating stations; in each case, the emergence was greater than last year. Only one station reported a greater emergence in 1926 than this year.

B. R. Coad (Cooperative Report April 1): The following table gives the percentage of weevils that had emerged prior to April 1 at the several cooperating stations, also comparative figures for the same date in 1925-1926. It will be noted in this table that weevil emergence was somewhat greater this year prior to April 1 than in 1926, at eight points, and somewhat less than last year at four points. It is too early to predict the final emergence, but it is now obvious that the percentage of survival will probably be greater this year than in 1926 at many points.

Station

Per cent of number put  
into cages that emerged  
prior to April 1.

	1925	:	1926	:	1927	:
Raymond, Miss.....		0	:	.65		
College Station, Tex.....	1.96	:	2.45	:	2.28	:
Florence, S. C.....	1.80	:	.04	:	1.51	:
Aberdeen, N. C.....	.19	:	0	:	1.15	:
A. & M. College, Miss.....		0	:	.36		
Auburn, Ala.....	0	:	0	:	.18	:
Rocky Mount, N. C.....	.05	:	.02	:	.16	:
Tallulah, La.....	.01	:	.02	:	.12	:
Stoneville, Miss.....		0	:	.10		
Experiment, Ga.....	.40	:	.02	:	0	:
Baton Rouge, La.....	1.64	:	.80	:	0	:
Holly Springs, Miss.....	0	:	0	:	0	:
Poplarville, Miss.....		.05	:	0		
Fayetteville, Ark.....			0	:		

Boll Weevil Prospects for 1927 (April 1): Temperatures throughout the Cotton Belt have been unusually mild during the past winter, and undoubtedly as a consequence survival among those weevils actually in hibernation will be higher than usual. This is offset by the fact that in many sections last summer and fall conditions were such that the number of weevils entering hibernation was much lower than usual. Consequently, spring infestations are going to depend to an unusual degree upon conditions last fall in each locality. Wherever weevils were abundant last fall the spring emergence will be heavy. This season's examinations were distributed throughout Louisiana from the south to the north at approximately the same points that were included in 1926 and a fairly representative average condition is reported. It is obvious that in northern Louisiana the weevil population is larger this year than at any time since 1923 and smaller in southern Louisiana than last year. "Spotted" conditions as regards density of infestation may again be expected.

The points in South Carolina where examinations were made are representative of conditions in the coastal plain section of that State. It is obvious that the initial infestation in that section will be light this season. The weevil crop was comparatively light last fall because of a low survival last spring and unfavorable weather conditions for weevil development during the cotton-growing season. In northern Alabama, northern Georgia, South Carolina, and North Carolina, generally speaking, climatic conditions last year effected almost complete weevil control, slight injury being reported in only a few restricted localities in this entire area. A generally light initial infestation may be expected throughout this area but there are many points where local conditions favored weevil multiplication last fall and these points may expect heavier infestation. Hibernation

cage records in South Carolina show that the percentage of survival of weevils actually entering hibernation will be high.

To summarize, the Mississippi Valley territory may expect a somewhat heavier initial infestation than was experienced in 1926, the infestation decidedly decreasing to the eastward. However, in the eastern areas sufficient weevils will be present to cause serious damage provided weather conditions during the cotton-growing season are favorable for weevil development. In Texas, especially in the central portion, the weevil population was decidedly increased by favorable weather conditions during the latter part of the growing season of 1926 and a somewhat heavier initial infestation is expected this season than for several years.

As has been pointed out in reports in past years, these records are only an indication of the initial infestation that may be expected; the final factor that will determine weevil damage is summer weather conditions. In large sections of the Cotton Belt a normal infestation and in some cases more than normal will be likely to occur and with conditions favorable to the weevil serious damage may be expected.

Louisiana

W. E. Hinds (April 25): No boll weevils have emerged from among about 900 placed in hibernation cages October 8 and 24, 1926. Killing frosts occurred about November 24, and it is evident that the interval was sufficient to accomplish practically complete starvation of weevils before it became cold enough for them to hibernate. This indicates also that where cotton fields were cleaned up thoroughly by the middle of October, 1926, there would have been no survival of weevils therein.

Texas

T. C. Barber (April 12): At Brownsville, in a field of volunteer cotton this morning, I found a heavy weevil infestation, all stages from egg to newly-emerged adults being plentifully present. While fruiting of the cotton plants was light, the squares showed about 90 per cent infestation, and numerous fallen squares could be found on the ground containing immature weevil stages. This is the first place this season where I have found more than a trace of weevil infestation in this locality.

THIRIPS (Thysanoptera)

Texas

F. L. Thomas (April 25): Thrips were very abundant on cotton several weeks ago but have now disappeared.

COTTON FLEA (Psallus seriatus Reut.)

Louisiana

W. E. Hinds (April 25): The cotton flea hoppers' overwintered eggs have been hatching for several weeks, and we anticipate the abundant occurrence of this species this season. It is likely that its injury to cotton may be fully as widespread as it was in 1926.

Texas F. L. Thomas (April 25): Practically no flea hopper infestation in the Lower Rio Grande Valley and very little around Corpus Christi.

Texas F. L. Thomas (April 16): Since April 1, the number of cotton flea hoppers hatching from the overwintering eggs has greatly decreased and apparently the spring emergence of this insect is practically completed. In this section of the State adult cotton flea hoppers are now common in the field and egg-laying is well under way in weeds, especially in evening primrose.

A brief survey of several cotton fields in the Rio Grande Valley on April 14 the 15 showed practically no infestation of the cotton flea hopper. At present it appears that the injury by this insect will not be as great as it was last year, although localized infestations will likely occur in fields where the spring weed food plants are not destroyed.

#### TOBACCO

##### GARDEN SPRINGTAIL (Sminthurus hortensis Fitch)

Connecticut W. E. Britton (April 20): Large numbers of springtails feeding on young plants in seed beds. Frequently troublesome in preceding years. Reported from Hockanum, East Hartford.

#### GRASSHOPPERS (Acridiidae)

Florida F. S. Chamberlin (April 5): Newly set tobacco plants are being infested with young hoppers which are unusually abundant for this season in Gadsden County.

#### POTATO TUBER WORM (Phthorimaea operculella Zell.)

Florida F. S. Chamberlin (April 25): Splitworms are more abundant in Gadsden County than usual this spring. The larvae frequently work into the buds of small tobacco plants, causing considerable injury.

#### RICE

##### SUGARCANE BEETLE (Eiethcola rugicollis Lec.)

Louisiana J. W. Ingram (April 21): The sugarcane beetle has been found injuring rice in all unflooded fields examined during the month. In no field in the vicinity of Crowley has the damage amounted to as much as 1 per cent of the stand of rice. A letter was recently received from Sulphur, stating that the rice near the Texas line was "suffering severely" from this beetle gnawing the unflooded plants beneath the surface of the soil.

SUGARCANE

SUGARCANE BORER (Diatraea saccharalis Fab.)

Louisiana

T. E. Holloway and W. E. Haley (April 11): Larvae of the first instar of the sugarcane moth borer, Diatraea saccharalis cramboides, were found in some abundance at Raceland and Houma. A few larger larvae were also found.

Lionel L. Janes, T. E. Holloway, and W. E. Haley (April 19): During the season of 1926 a loss of 16 per cent of a normal crop, or 38,352 tons of sugar, is estimated. No account is taken of the damage caused to cane used for sirup or damage to planted seed cane.

The following table shows the estimated loss occasioned by this insect for the series of years 1922-1926 and also the five-year average.

Year	Acreage in cane	Loss caused by used only for sugar	Loss caused by sugarcane moth borer in per cent of a nor- mal crop.	Loss caused by sugarcane moth borer in short in short	Loss caused by cane borer in short	in pounds	of sugar.
1922	241,433	:	17	:	51,565	:	123,130,330
1923	217,259	:	23	:	74,959	:	149,908,710
1924	162,640	:	13	:	13,715	:	63,429,600
1925	190,248	:	30	:	85,612	:	171,223,200
1926	159,800	:	16	:	38,352	:	76,704,000
5-year average	194,276	:	19.8	:	58,990	:	116,879,268

W. E. Hinds (April 25): Sugarcane borer development through the first generation is abundant and three or four weeks ahead of the same stage in 1926. The growth of corn has been unusually slow in comparison with the growth of cane this season. Therefore the infestation of borers is less distinctly concentrated in corn but is much more apparent in the more thrifty growing plats of cane, particularly in some of the new varieties.

SUGARCANE BEEFLE (Euetheola rugiceps Lec.)

Louisiana

W. E. Hinds (April 25): The rough-headed corn stalk beetle, Euetheola rugiceps, is reported in many localities and is doing serious damage to stands of sugarcane, corn, rice, and other crops. Apparently they do not attack soy beans as these are left unharmed where planted with corn which is destroyed.

Mississippi

R. W. Hanned (April 25): Quite a few complaints have been received during the past few weeks in regard to the rough-headed cornstalk beetle or sugarcane beetle, Euetheola rugiceps, most of which have come from the southwestern part of the State. Complaints accompanied by specimens in regard to injury caused to young corn and sugarcane have been received from Roxie, Crystal Springs, Pelahatchie, McNair, and Yazoo City. Specimens were received from Canton where they were reported as injuring strawberries.

#### GREENHOUSE AND ORNAMENTAL PLANTS

##### MISCELLANEOUS FEEDERS

###### STRAWBERRY FLEA BEETLE (Haltica ignita Ill.)

Florida

G. B. Merrill (March 28): This insect was reported as attacking citrus, rose, oleander, gladiolus, St. Augustine grass, and all weeds, at Tampa.

##### APHIDAE

O. I.

.. Snapp (April 20): Apparently more abundant than usual at this season of the year. Attacking ornamentals in Fort Valley.

##### WHITE FLIES (Aleyrodidae)

Oliver I. Snapp (April 4): These insects are apparently more abundant than usual on a number of plants and shrubs (ornamentals) in the yards at Fort Valley. In some cases considerable damage has been done.

##### GALL

###### CHRYSANTHEMUM MIDGE (Diarthronomyia hypogaea Loew )

Ohio

E. W. Mendenhall (April 26): The chrysanthemum midge has been well under control in the greenhouses in Springfield. It was taken in time and the use of nicotine sulphate seems the most effective. Fumigation does not seem very effective in the control of the midges.

##### CRAPE MYRTLE

###### STRAWBERRY FLEA BEETLE (Haltica ignita Ill.)

Florida

G. B. Merrill (March 29): At Winter Haven this insect was completely defoliating crape myrtle, doing severe damage.

ROSE

COTTONY-CUSHION SCALE (Icerya purchasi Mask.)

Louisiana

W. E. Hinds (April 25): The cottony cushion scale has been unusually abundant in the vicinity of Hammond and Covington and has been reported by several on roses at Baton Rouge.

STRAWBERRY FLEA BEETLE (Haltica ignita Ill.)

Florida

G. B. Merrill (April 1): Attacking rose at Dundee, doing severe damage.

RASPBERRY CANE BORER (Oberea bimaculata Oliv.)

Virginia

F. W. Poos (March 29): Several rose growers in Norfolk have this month reported damage by this insect.

A DASCILLED BEETLE (Ptilodactyla sp.)

Monthly Letter of the Bureau of Entomology No. 155 (March, 1927): Dr. E. A. Chapin spent March 3, 4, and 5 in Philadelphia, studying types of Coleoptera, especially those belonging to the genus Ptilodactyla. Since his return to Washington he has completed a short paper on Ptilodactyla, describing new species, one of which is injurious to roses in greenhouses.

F O R E S T A N D S H A D E - T R E E I N S E C T S

MISCELLANEOUS FEEDERS

Louisiana

FALL WEBWORM (HYPHANTRIA CUNEA Drury)

T. E. Holloway and W. E. Haley (April 12): The fall webworm has made its appearance in southeastern Louisiana. It was observed on willow, privet, and rose.

CAMPHOR

CAMPHOR SCALE (Pseudaonidia duplex Ckll.)

Louisiana

W. E. Hinds (April 25): The camphor scale has spread to Jennings, and is destroying camphor trees at that point.

CEDARS

BAGWORM (Thyridopteryx ephemeraeformis Haw.)

Kansas

J. W. McColloch (March 28): The cedar trees at Independence and Beable are covered with the bags of this insect.

EUONYMUS RADICANS VEGETUS

EUONYMUS SCALE (Chionaspis euonymi Comst.)

New York      E. P. Felt (April 22): This scale was so abundant on a Rochester planting that it was cut to within 6 inches of the ground, the infested vines burned, and the stumps sprayed with miscible oil. This treatment was effective (R. E. Horsey).

North Carolina

Z. P. Metcalf (April 25): The Euonymus scale is especially abundant this spring.

HAWTHORN

SILKY ANT (Formica fusca subsericea Say)

Missouri

A. C. Burrill (March 17): In the woods at Jefferson City, these workers are gnawing into opening buds, in some cases gnawing into the very heart of the bud.

HOLLY

PUSTULE SCALE (Asterolecanium pustulans Chil.)

Virginia

F. W. Poos (March 23): Doing considerable damage on one estate at Norfolk. Attacking holly.

LILAC

OYSTER-SHELL SCALE (Lepidosaphes ulmi L.)

New York

E. P. Felt (April 22): Two years ago about 15 lilac shrubs in Cobb's Hill Park, Rochester, were very badly infested, most of the branches being completely covered. The shrubs were cut to the ground and today they are full of flower buds with every promise of a magnificent bloom (R. E. Horsey).

South Dakota

H. C. Severin and Geo. Gilbertson (April 14): Ordinarily this scale is one of our most serious pests of fruit trees, shade trees, etc. It did not pass the winter very successfully. In many instances less than 5 per cent of the eggs survived the winter.

LILIES

A NOCTUID (Xanthopastis timais Cramer)

Florida

J. R. Watson (April 8): The Chinese lily and Amaryllis, the growing of which has been rapidly extended in Florida during the past two years, are in some localities being attacked by the caterpillar Xanthopastis timais Cramer.

BOXELDER

BOXELDER APHID (Periphyllus negundinis Thos.)

Missouri

A. C. Burrill (April 17): So numerous on quarter-developed clusters of seed keys and peduncles as to shower honeydew all over surrounding bushes and grass. Cremastogaster lineolata, is tending them, and no enemies have been noted.

ELM

ELM SCURFY SCALE (Chionaspis americana Johns.)

South Dakota

H. C. Severin (April 4): This scale has become exceedingly abundant and harmful to elm during the past year in South Dakota.

ELM BORER (Saperda tridentata Oliv.)

South Dakota

H. E. Severin (April 14): The elm borer has killed many elms in South Dakota during the past few years.

ELM LEAF BEETLE (Galerucella xanthomelaena Schrank)

New York

E. P. Felt (April 23): The elm leaf beetle is expected to appear in the Rye area in slightly increased numbers as compared with last year (Henry Bird).

REDDISH ELM SNOUT BEETLE (Magdalis armicollis Say)

South Dakota

H. C. Severin (April 14): The reddish elm snout beetle has been increasing in numbers in South Dakota during the past years. It does considerable damage.

JUNIPER

JUNIPER WEBWORM (Ypsolophus marginellus Fab.)

Connecticut

W. E. Britton (April 19): Many twigs have been webbed together with larvae feeding inside the webs at Cheshire.

SPRUCE

SPRUCE GALL APHID (Adelges abietis L.)

W. E. Britton (April 23): Old galls received from New Haven and Southington on Norway spruce.

## INSECTS INFESTING HOUSES AND

## PREMISES

## TERMITES

## Illinois

A. E. Miller (April 18): Observations upon the biology and control of the common termite Reticulitermes flavipes Kol. are being continued by the State Natural History Survey. The chief offense thus far found responsible for these insects gaining access to buildings is wooden cellar window frames in direct contact with the soil, with unfilled mortar joints in foundation walls ranking a close second. From numerous reports, this insect would seem to be generally distributed throughout the State with the greatest intensity prevailing through central and southern counties.

## Missouri

A. C. Burrill (April 5): Specimens were sent to Dr. Snyder for determination on April 8, the swarm beginning on April 5, and continuing through to April 11. They were worse around the radiator and one corner of a living-room, coming out of cracks between the oak floor and under the baseboard. It was also a general nuisance to invalids.

A. C. Burrill (April 7): Hundreds of winged termites swarmed in the basement of the Capitol March 14, which is the earliest record for this region. Probably it was abortive in the sense that none of them were observed to scatter out of doors.

## Nebraska

Don B. Whelan (April 25): At Julian (Nemaha County) termites have damaged the timbers in houses, a church, and a school building. They have also been reported damaging a house at University Place (Lancaster County) and killing cherry trees in Phelps County. They have also been reported in Omaha (Douglas County).

## Kansas

J. W. McColloch (April 19): Injury by termites seems to be on the increase. Damage to woodwork in dwellings has been reported during the past month from Lindsborg, Salina, Americus, Lyons, Fort Scott, Pleasanton, and Herington. At Salina the woodwork in one house has been replaced twice within the last three years. A store building at Coffeyville has had the framework of the show windows undermined. Tree roots have been injured at Logan. A pin oak tree at Manhattan has been girdled and rhubarb plants at Bushton have been injured.

## Texas

F. C. Bishopp (April 23): Many reports have been coming in of white ants swarming in and about residences in this City (Dallas).

TRAIL ANT (Cremastocaster lineolata Say, var.)

## Missouri

A. C. Burrill (April 7): On April 3, during the great activity of this species reported previously for this date, a small colony, some two dozen winged Queens, was observed to swarm from the foundation of a garage at Jefferson City about 2 p.m.

CRUSTACEAN (Caecidotea stygea Pack.)

Alabama G. E. Culver (March 31): Found in the wells at Mountain Creek.

ROACHES (species undetermined)

Alabama Mrs. E. E. Russell (March 31): Reported from Jasper.

POWDER-POST BEETLES (Lyctus spp.)

Nebraska Don B. Whelan (April 25): These beetles were found very numerous in floors in Omaha, where they had caused quite a little damage. They have also been reported as working on cottonwood lumber at Syracuse, Otoe County.

Kansas J. W. McColloch (April 7): These insects have caused considerable damage to the oak pews in a church at Bunnymede, Harper County.

LARDER BEETLE (Dermestes lardarius L.)

New York E. P. Felt (April 25): Dermestids, especially Dermestes lardarius, were somewhat numerous April 20.

CARPET BEETLE (Anthrenus scrophulariae L.)

New York E. P. Felt (April 25): A few Anthrenus scrophulariae were observed April 20.

I N S E C T S A T T A C K I N G M A N A N D  
D O M E S T I C A N I M A L S

MAN

SALT-MARSH MOSQUITO (Aedes sollicitans Walk.)

New York E. P. Felt (April 23): The first adults were observed at Orient, L. I., April 20 (Roy Latham)

HUMAN FLEA (Pulex irritans L.)

Texas F. C. Bishopp (April, 1927): A few reports of human flea infestations in the vicinity of Dallas and Ft. Worth have come to our attention during April.

HOUSE FLY (Musca domestica L.)

Texas F. C. Bishopp (April 23): House flies have increased greatly during April, and are now causing considerable annoyance about dairies in this vicinity (Dallas).

CATTLE

HORN FLY (Haematobia irritans L.)

Texas F. C. Bishop (April 23): During March, horn flies became rather abundant in southwestern Texas, but their number did not materially increase, it actually decreased in some sections of the State during April. This condition may be due to heavy wind and rain storms. On this date, the number of flies per animal ranges from 10 to 1500, and annoyance is less noticeable in most sections than normal for this time of the year.

STABLE FLY (Stomoxys calcitrans L.)

Texas F. C. Bishop (April 23): Stable flies have been more or less annoying to stock throughout the winter, and at times during March and April, they have become quite troublesome, especially on dairy cattle.

A LOUSE (Linognathus vituli L.)

Texas F. C. Bishop (April 23): During February, March, and April much complaint came from the cattlemen of western Texas on the infestation of their animals by these lice. Many ranchmen dipped their herds during February, March, and early April.

A DUNG BEETLE (Canthon laevis Drury)

Texas D. C. Parman & F. C. Bishop (April 17): The first activity of tumble bugs was observed near Uvalde today. At times this insect materially reduces the abundance of horn flies.

SCREW WORM (Cochliomyia macellaria Fab.)

General statement F. C. Bishop (April 25): Many screw worm flies came through the mild winter successfully, and the attack on livestock began exceptionally early this spring. In fact, some cases were reported during January and February in the southern part of Texas. Numerous cases began to appear in the range country of southwestern Texas in March, and the attack on livestock extended farther northward during April. Most stockmen expect an unusually bad screw worm year. The fact that the ranges are good, and that there has been comparatively light losses of stock on the range, are favorable for the stockmen. In several sections of western Texas, ranchmen are organizing for systematic trapping of screw worm flies. Some cases of screw worm injury to livestock have also been reported this spring from New Mexico and California.

HORSES

THROAT BOT FLY (Gastrophilus nasalis L.)

Texas F. C. Bishop (April 16): Throat bot flies have been attacking

horses in this vicinity (Menard) during the last few days. The number of eggs present is still very small.

SHEEP

SHEEP BOT FLY (Oestrus ovis L.)

Texas

F. C. Bishop (April 16): Flies of this species were observed annoying sheep very much in the vicinity of Menard. (April 21): Adults of this species compelling sheep to stop grazing during warmer parts of the day at Dallas.

BLACK BLOW FLY (Phormia regina Meig.)

General statement

F. C. Bishop (April 25): Losses from the attack of the wool maggot on sheep have been comparatively light in Texas up to April 20. The flies are still abundant, however, and very little shearing has been done. As a preventive measure, many sheepmen have tagged their flocks this spring and this is no doubt partially responsible for the reduction in the number of wool maggot cases.

POULTRY

STICKTIGHT FLEA (Echidnophaga gallinacea Westw.)

Texas

F. C. Bishop (April 22): There is a general infestation of the sticktight flea at Uvalde, and the loss of young chickens has probably been between 5 and 10 per cent and as high as 50 per cent in at least one case.

CHICKEN MITE (Dermanyssus gallinae Redi)

Texas

F. C. Bishop (April 25): The chicken mite appears to be about as abundant as usual this spring. Numerous reports of injury to fowls, especially during brooding, have been received.